

TANDBERG

TCD 440 A

Circuit Diagrams with Alignment Instructions

Mechanical adjustments, see Service Manual for TCD 330, Ordering No. 714021



Electrical adjustments for the TCD 440A

General

Before adjusting, the tape path must be cleaned and demagnetized. It is necessary that the tape path is correctly adjusted, consult the service manual for the TCD 330, part No. 714021.

Carry out the adjustments in the order described because the adjustments affect each other. Remove the top panel and the base panel.

Equipment required

- 2 millivoltmeters
- Audio signal generator
- Frequency counter
- Distortion meter
- Wow and flutter meter
- Tandberg test cassettes:
 - No. 21 (Speed check, 1000 Hz)
 - No. 22 (Wow and flutter check, 3150 Hz)
 - No. 23 (Azimuth adj. playb. head, 6300 Hz)
 - No. 24 (Playback level adj., 1000 Hz)
- Measuring cassettes:
 - Maxell UD XL I (Type I)
 - Maxell UD XL II (Type II)
 - Fuji Metal or TDK Metal MA-R (Type IV).

Before adjusting, set the buttons to:

- MPX-FILTER (situated at the back of the deck) to OFF.
- Dolby NR.* to Off.
- Output Level controls to maximum.

Before adjusting, fold out page 5.

Oscillator

The oscillator frequency is between 80 and 100 kHz. The voltage measured on the erase head should be between 7 and 9 volts.

* The word "Dolby" is registered trade mark of Dolby Laboratories Inc., U.S.A.
NR stands for Noise Reduction.

Bias traps

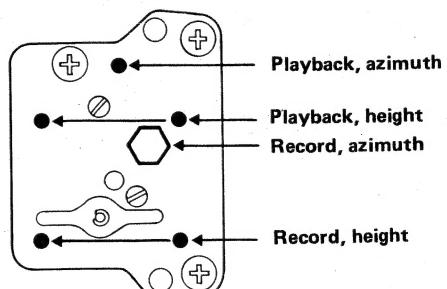
Measure with a millivoltmeter on pin L and R on the oscillator board (see figure) and adjust L1501 and L1601 to minimum reading on the millivoltmeter.

Sensitivity adjustment

- Set the Monitor button to Source position, and Input and Output Level controls to maximum.
- Apply 8 mV, 1000 Hz to the RADIO socket (DIN) or 80 mV, 1000 Hz to the INPUT sockets (Phono) from the audio signal generator.
- Adjust the SENSITIVITY ADJ. potentiometers R101/R201 to obtain 775 mV measured on a millivoltmeter connected to the Dolby encoder output TP1 and TP2 on the Main board, see figure.
- Move the measure probe to the Dolby decoder output R1303 and R1403 on the Dolby board, see figure.
- Adjust the SOURCE LEVEL ADJ. potentiometers R118/R218 to obtain 775 mV.
- Check the frequency response in Source.

Azimuth adjustment, playback level

- Insert a Tandberg test cassette No. 23 or a standard azimuth cassette.
- Set the Monitor button to Tape and connect a millivoltmeter to each channel of the OUTPUT sockets.
- Press the Play button. Adjust the playback azimuth screws shown in the figure to obtain maximum reading on each channel.



Adjustments screws for the heads

Playback level and meter adjustment

- Insert test cassette No. 24.
- Connect a millivoltmeter to each channel of the Dolby decoder output shown in the figure.
- Adjust the PLAYBACK LEVEL ADJ. potentiometers R119/R219 until you read 775 mV on each channel.

When the playback level is correct, adjust the level meter to 0 dB with PLAYBACK METER ADJ. R114 and R214.

Azimuth and height, record head

- Set the Bias Selector to I and press the button marked Tape Selector Type I.
- Use Maxell UD XL I or an equivalent Type I tape.
- Apply 1000 Hz to the INPUT sockets both channels.
- Set the Monitor button to Tape and connect a millivoltmeter to the OUTPUT sockets both channels.

NOTE! The record height screws must be adjusted by equal amounts to ensure that the head parallelism does not change.

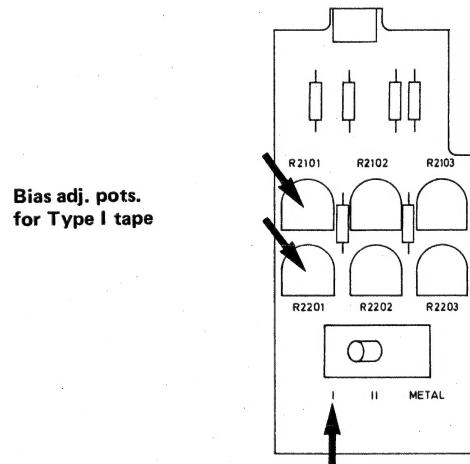
- Press the Record button and turn the two record head height screws shown in the figure by equal amounts (the same number of degrees) to obtain the maximum reading on both channels of the OUTPUT sockets, or the best compromise.
- Adjust the azimuth (15 kHz) and the height alternatively, until the head sits correctly.
- Azimuth can also be adjusted with the built-in control oscillator (10 kHz).

Overall frequency response with Type I tape (bias)

- Set the Monitor button to Tape and press the Tape Selector Type I button.
- Apply 1000 Hz from the signal generator to one of the inputs (RADIO socket or INPUT sockets).
- Reduce the level at the signal generator by 35 dB or reduce the level by a similar amount on the Input Level controls.
- Press the Record button, and adjust the BIAS ADJ. TYPE I TAPE R2101 and R2201 (see figure) to obtain maximum reading at the outputs.
- Sweep the audio generator through the full frequency range and check that the response curve is correct.

NOTE! Remember the azimuth adjustment on the record head.

- If necessary, adjust the curve with R2101 and R2201 to obtain correct response, ± 3 dB, 20 to 20000 Hz.



Bias adjustment board, seen from the component side

Adjusting the record current (Source/Tape) Type I tape

- Use the same input level as for the bias adjustment (-35 dB) and 1000 Hz.
- Adjust the record current by means of the REC. LEVEL ADJ. potentiometers R108 and R208 to obtain the same output level for both positions on the Monitor button.
- Then depress the Dolby NR. button and check the overall frequency response.

Overall frequency response with Type II tape (bias)

- Use the same procedure as for the Type I tape.
- Insert a Maxell UD XL II or an equivalent Type II tape.
- Press the Tape Selector Type II button, set the Bias Selector to II position and press the Record button.

NOTE! Remember the azimuth adjustment on the record head.

- Check the frequency response, and if necessary, adjust the BIAS ADJ. TYPE II TAPE R2102 and R2202 (see figure) to obtain the correct response, ± 3 dB, 20 to 20000 Hz.

Adjusting the record current (Source/Tape) Type II tape

- Use the same input level as for the bias adjustment (-35 dB) and 1000 Hz.
- Adjust the record current by means of the REC. LEVEL ADJ. potentiometers R109 and R209 to obtain the same output level for both positions on the Monitor button.

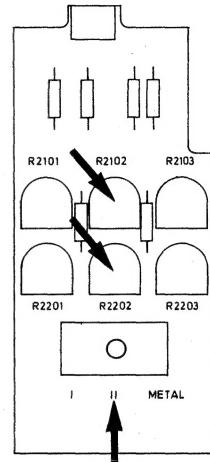
Overall frequency response with Metal tape

- Use the same procedure as for Type I tape.
- Insert a Fuji Metal or TDK MA-R (Type IV) tape.
- Set the Bias Selector to Metal position. Press both Tape Selector buttons.
- NOTE! Remember the azimuth adjustment on the record head.
- Press the Record button.
- Check the frequency response, and if necessary, adjust BIAS ADJ. METAL TAPE R2103 and R2203 (see figure) to obtain the correct response, ± 3 dB, 20 to 20000 Hz.

Adjusting the record current (Source/Tape) Metal tape

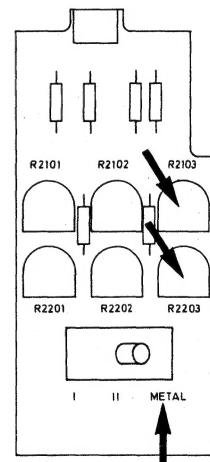
- Use the same input level as for the bias adjustment (-35 dB) and 1000 Hz.
- Adjust the record current by means of the REC. LEVEL ADJ. R142 and R242 to obtain same output level for both positions on the Monitor button.

Bias adj. pots.
for Type II tape



Bias adjustment board, seen from the component side

Bias adj. pots.
for Type IV (Metal) tape



Bias adjustment board, seen from the component side

Level meters adjustment, record

- Use Type I tape.
- Set the Bias Selector to I and press the Tape Selector Type I button.
- Set the Monitor button to Tape position.

NOTE! Remember the azimuth adjustment on the record head.

- Apply 1000 Hz to the INPUT sockets (both channels).
- Press the Record button and adjust the Input Level controls for 1.5 volt reading on the OUTPUT sockets.
- Adjust the REC. METER ADJ. potentiometers R113 and R213 to obtain 0 dB on the level meters.

DYNEQ adjustment

When the level meters are correct, reduce the level on the audio generator with 10dB. Set the generator to 15 kHz. Adjust with the DYNEQ adjustment R710 and R810, to – 4dB deflection on the level meters.

Distortion

Record 1000 Hz at 0 dB deflection on the meters. The max. distortion for record/playback are:
 3% with Type IV tape (Metal tape).
 1% with Type I and Type II tapes.

Erase test

Record 1000 Hz at 0 dB deflection on the meters. Record again to erase the 1000 Hz signal and play back to ensure that the signal cannot be heard.

Azimuth meter adjustment

- Set the built-in oscillator to ON.
- Set the Output Level controls to maximum.
- Insert a Type I tape (Maxell UD XL I) and press the Record button.

NOTE! Remember the azimuth adjustment on the record head.

- Adjust R223 AZIMUTH METER ADJ. to approximately – 3 dB deflection on the right meter.

- Check also that the meter deflection with a Type IV tape (Metal) is within the meter scale.

NOTE! Remember the azimuth adjustment on the record head.

Speed check

Play back Tandberg test cassette No. 21 (Speed check 1000 Hz) and measure with a frequency counter on the OUTPUT sockets:

$< \pm 0.5\%$ (995 to 1005 Hz).

If necessary, adjust to correct speed with R2008 SPEED ADJ. on the motor control board.

Wow and flutter check

Play back a Tandberg test cassette No. 22 (3150 Hz) and measure with a wow and flutter meter on the OUTPUT sockets:

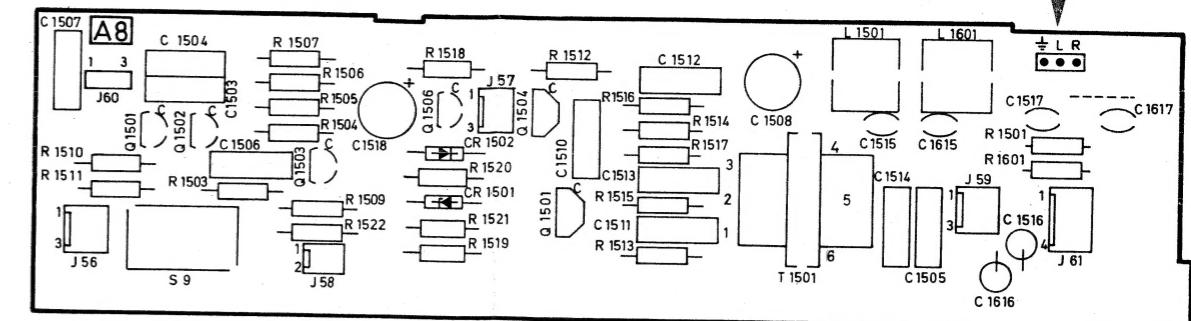
Weighted RMS: < 0.09%

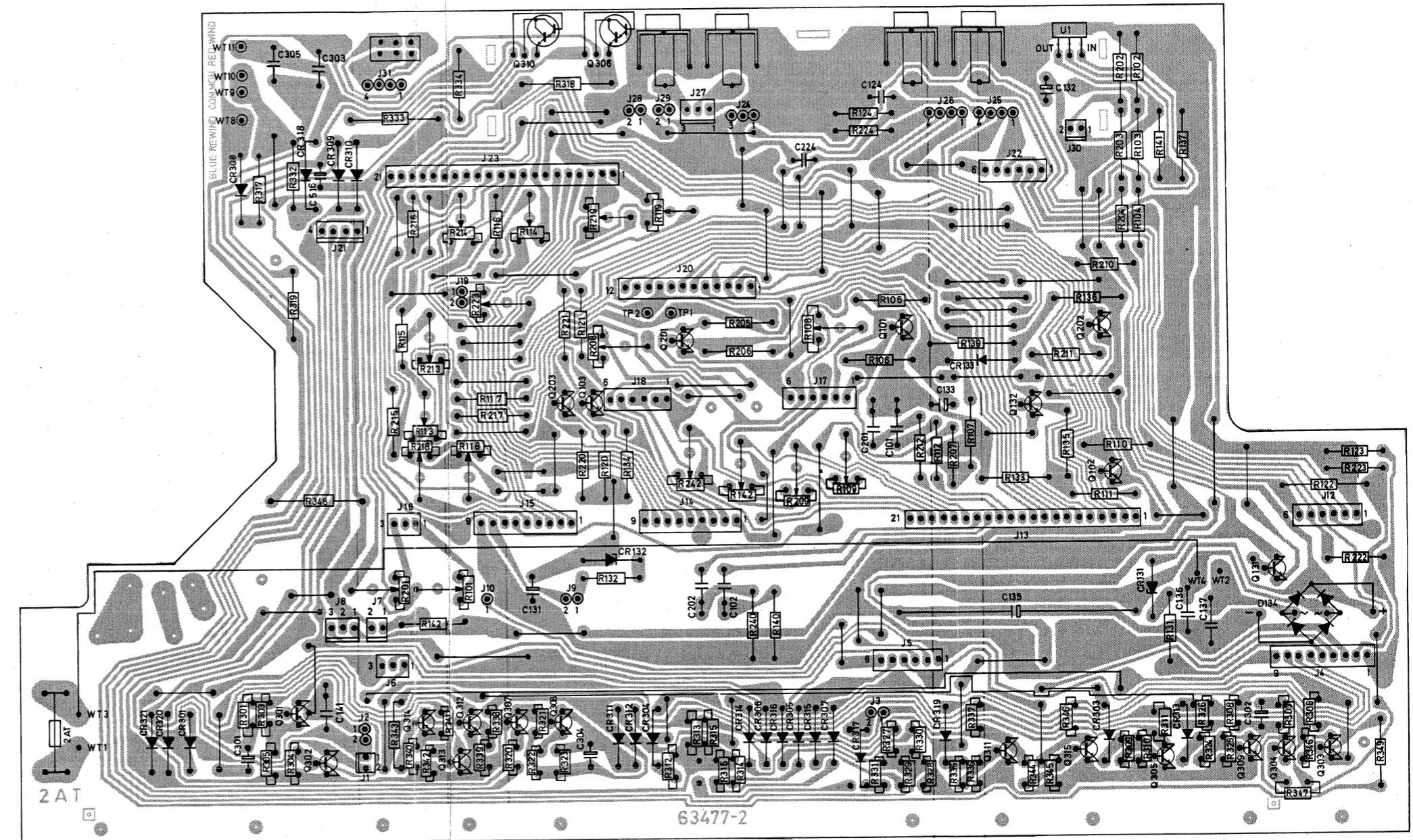
Weighted peak: < 0.14%

Record/playback

Use a Maxell C-60 UD cassette. Connect the wow and flutter meter generator to the INPUT sockets. Set the deck to Record and record for about half a minute. Wind back the cassette and set the deck to Play. Measure on the OUTPUT with wow and flutter meter:

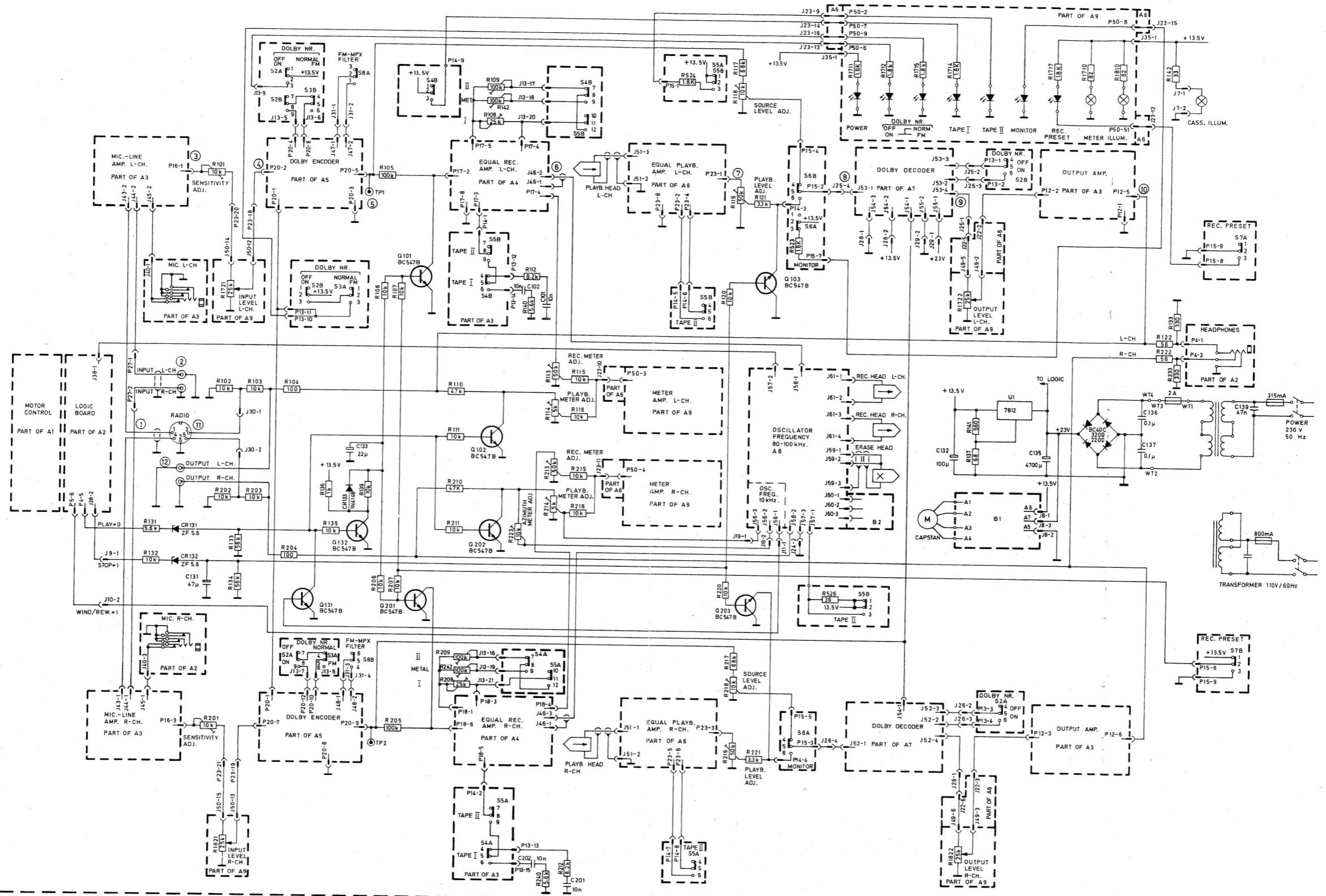
Weighted RMS: < 0.12%





A1 MAII

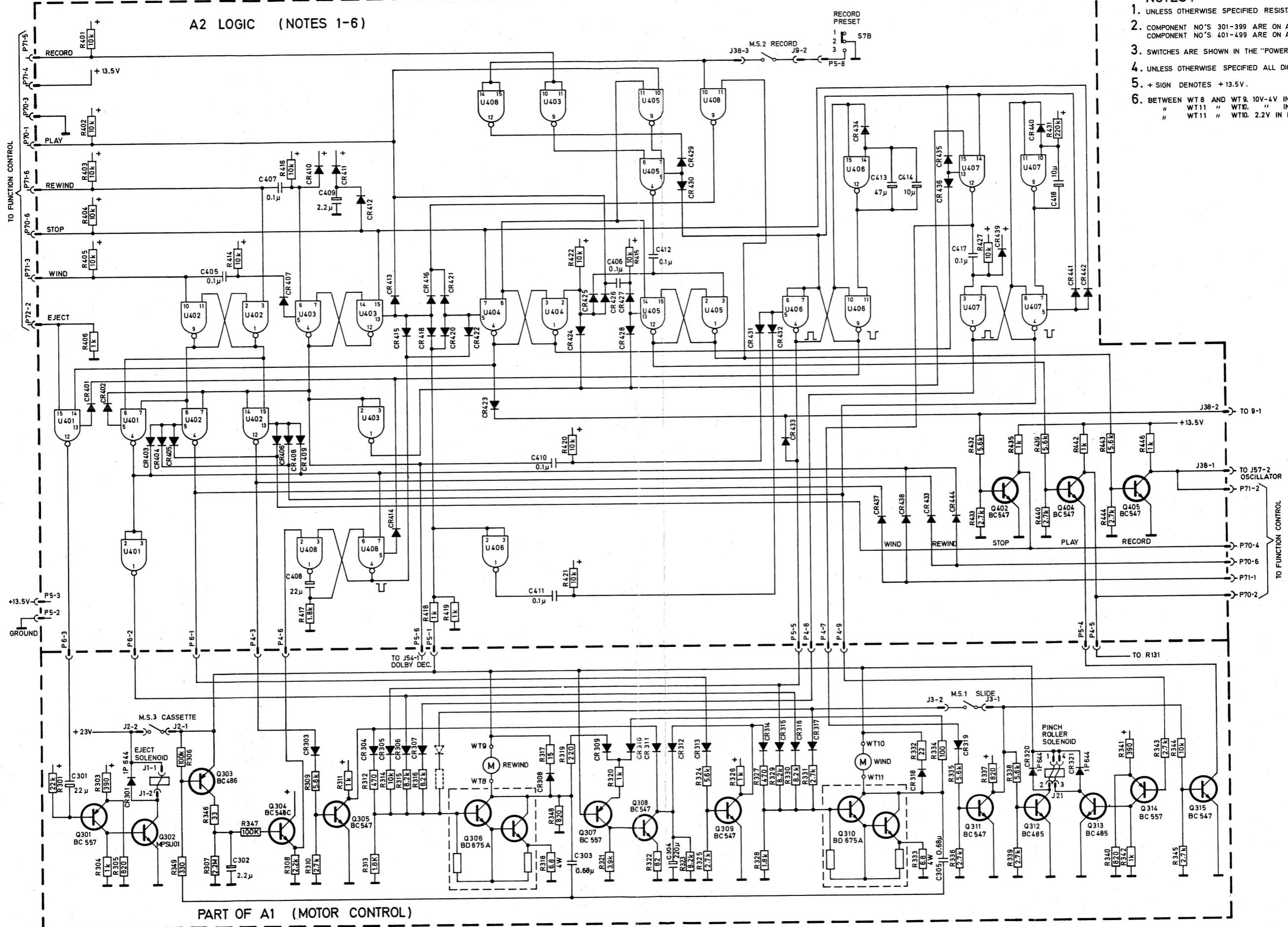
A1 MAIN BOARD (NOTES 1-4)

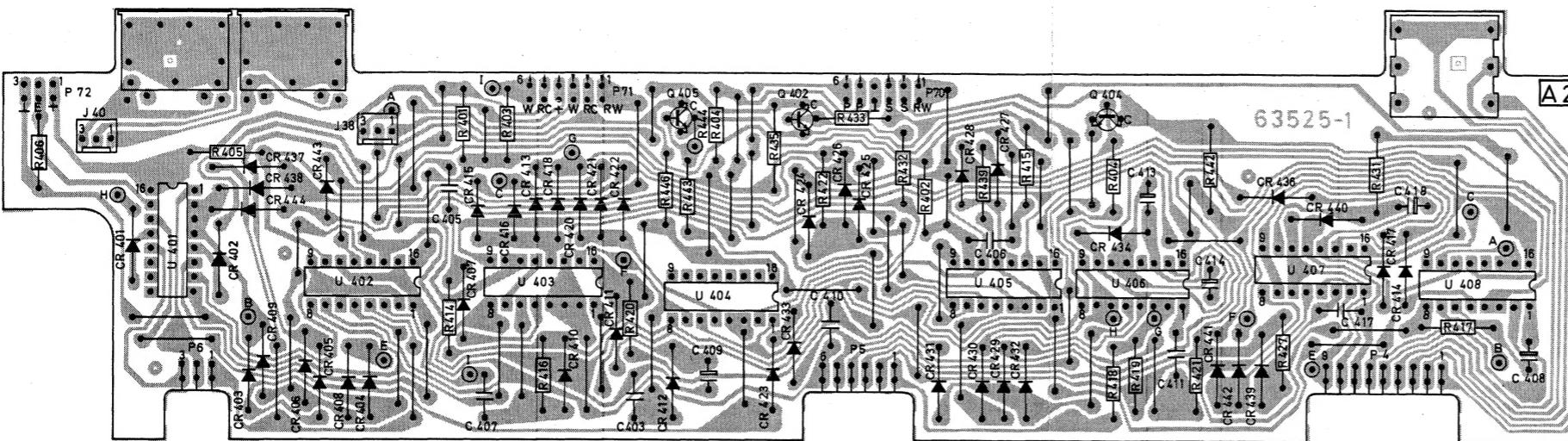


A2 LOGIC (NOTES 1-6)

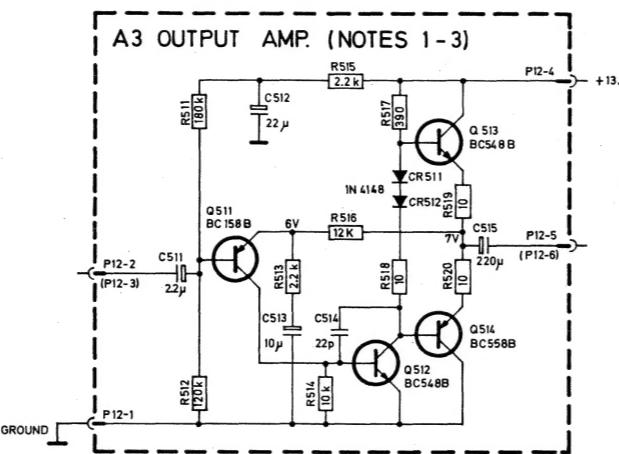
NOTES :

1. UNLESS OTHERWISE SPECIFIED RESISTANCE IN OHMS.
2. COMPONENT NO'S 301-399 ARE ON ASSEMBLY 1(A1).
COMPONENT NO'S 401-499 ARE ON ASSEMBLY 2(A2).
3. SWITCHES ARE SHOWN IN THE "POWER OFF" POSITION.
4. UNLESS OTHERWISE SPECIFIED ALL DIODES ARE 1N4148.
5. + SIGN DENOTES +13.5V.
6. BETWEEN WT8 AND WT9, 10V-4V IN REWIND MODE.
" WT11 " WT10, " IN WIND MODE.
" WT11 " WT10, 2.2V IN PLAY MODE.



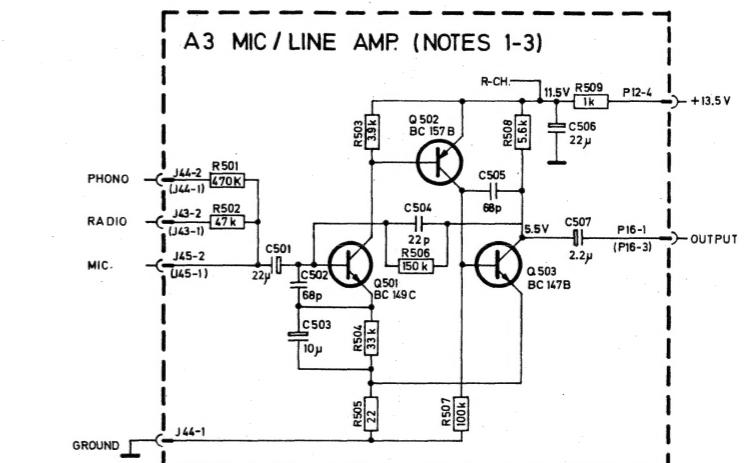


A2 LOGIC



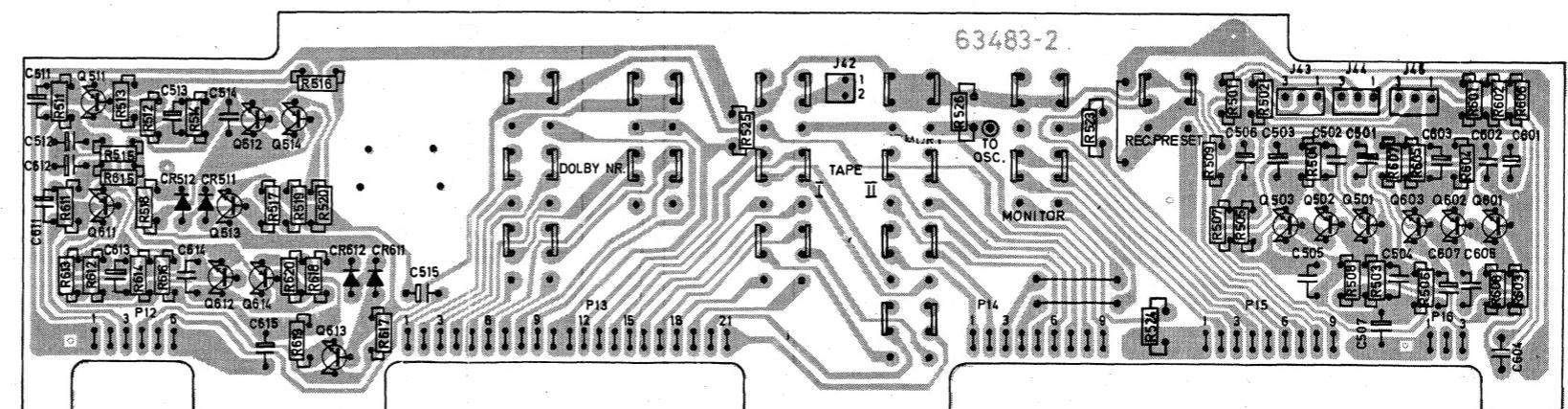
NOTES:

1. UNLESS OTHERWISE SPECIFIED RESISTANCE IN OHMS.
2. PLUG TERMINAL NO'S FOR THE R-CHANNEL ARE GIVEN IN BRACKETS BESIDE THE L-CHANNEL PLUG TERMINAL NO'S.
3. L-CHANNEL HAS 511-599, AND R-CHANNEL HAS 611-699 AS COMPONENT NO'S. WHEN REFERING TO R-CHANNEL COMPONENT ADD 100 TO THE L-CHANNEL NO'S. (E.G. R511 OF THE L-CHANNEL HAS THE SAME VALUE AS R611 OF THE R-CHANNEL.)

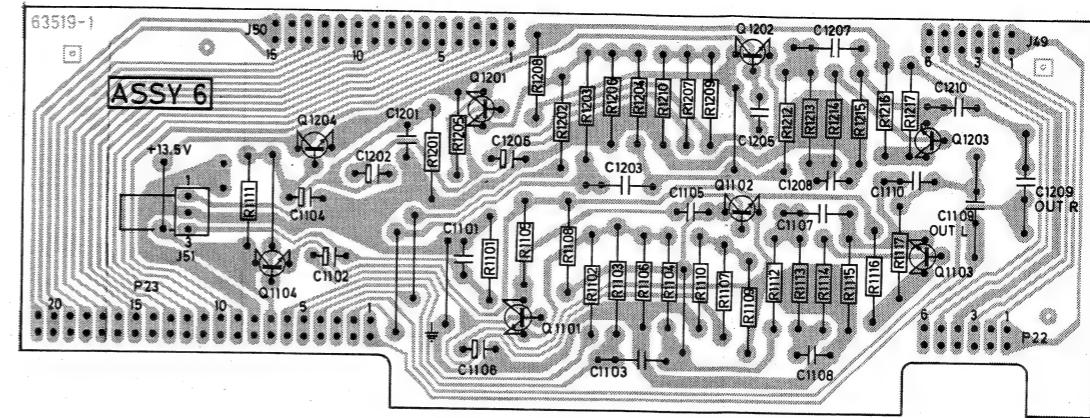
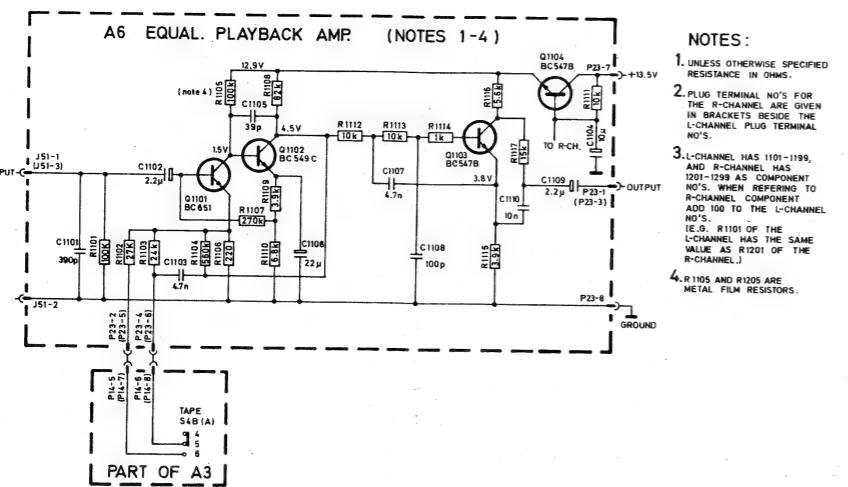


NOTES:

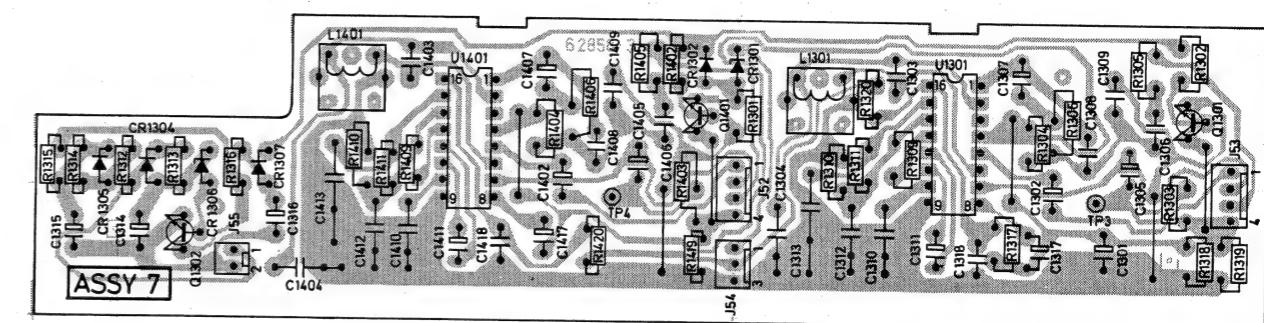
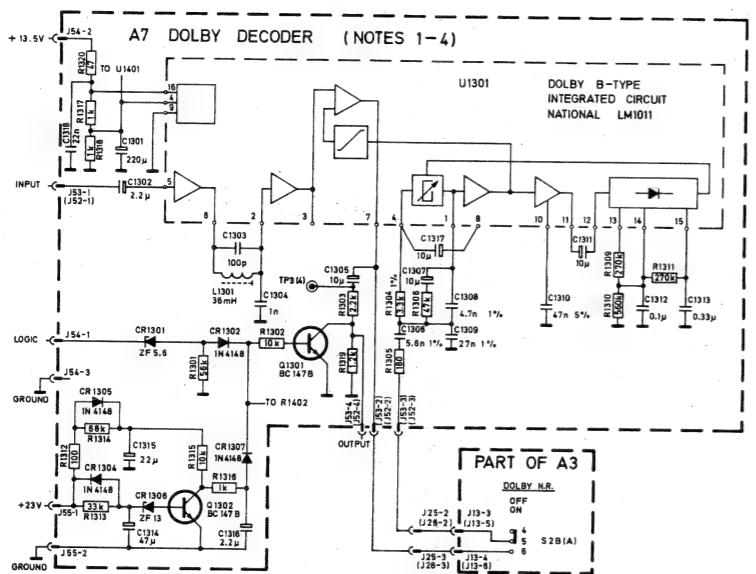
1. UNLESS OTHERWISE SPECIFIED RESISTANCE IN OHMS.
2. PLUG TERMINAL NO'S FOR THE R-CHANNEL ARE GIVEN IN BRACKETS BESIDE THE L-CHANNEL PLUG TERMINAL NO'S.
3. L-CHANNEL HAS 501-510, AND R-CHANNEL HAS 601-610 AS COMPONENT NO'S. WHEN REFERING TO R-CHANNEL COMPONENT ADD 100 TO THE L-CHANNEL NO'S. (E.G. R501 OF THE L-CHANNEL HAS THE SAME VALUE AS R601 OF THE R-CHANNEL.)



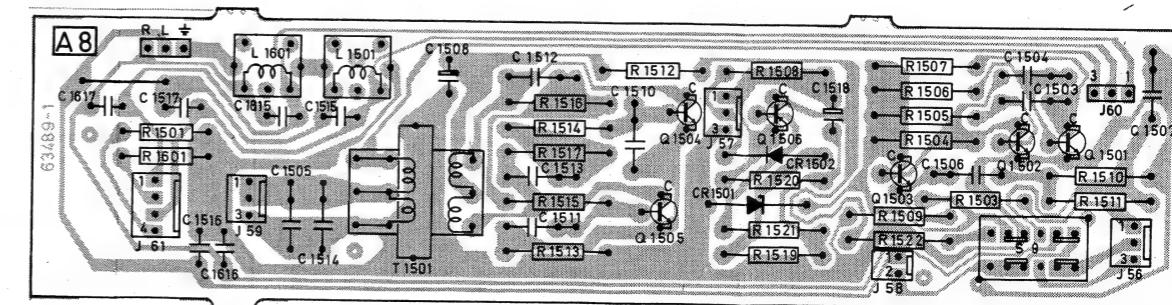
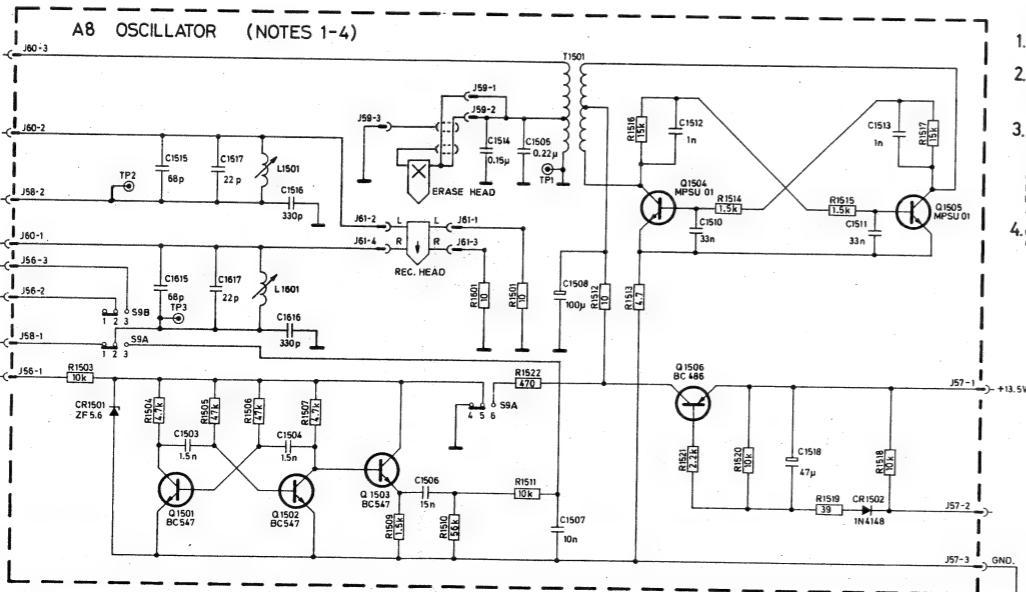
A3 OUTPUT MIC/LINE AMP.



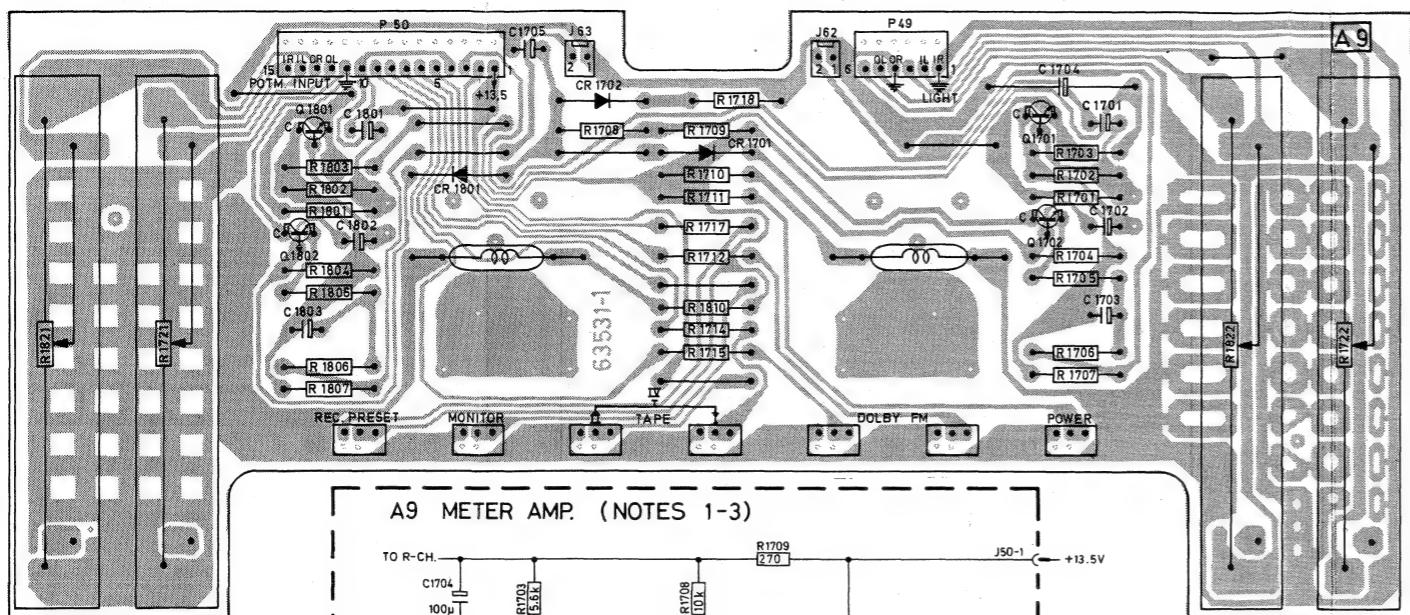
A6 EQUAL PLAYBACK AMP.



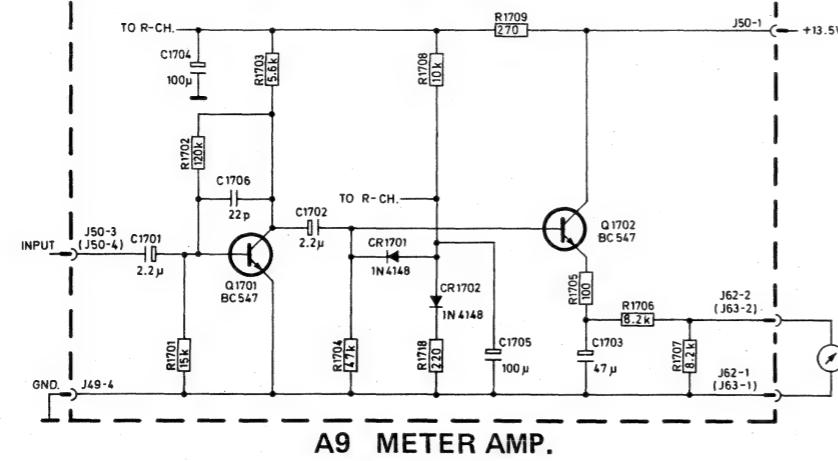
A7 DOLBY DECODER



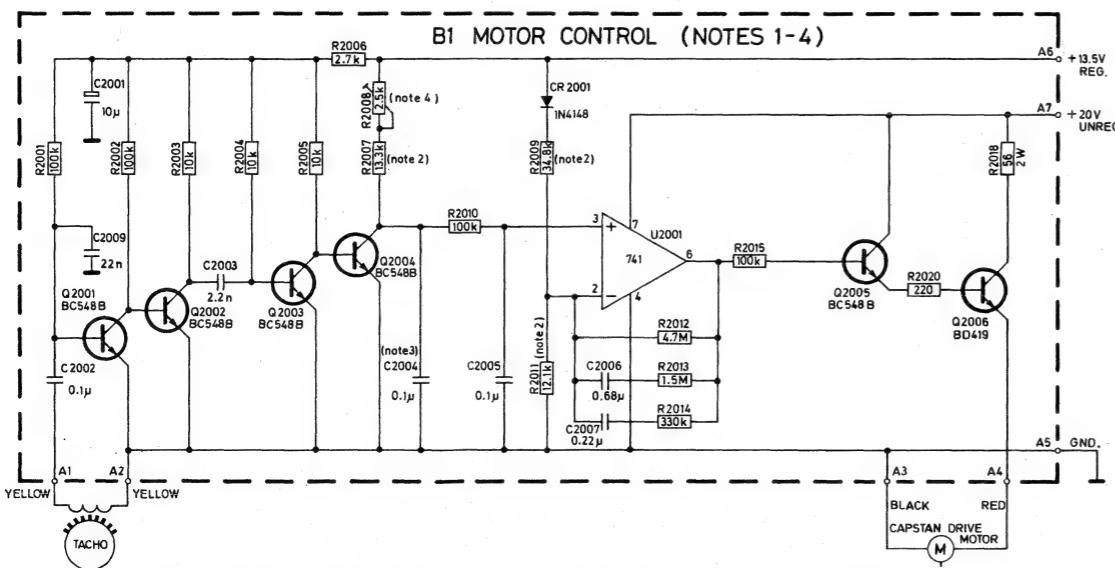
A8 OSCILLATOR



A9 METER AMP. (NOTES 1-3)



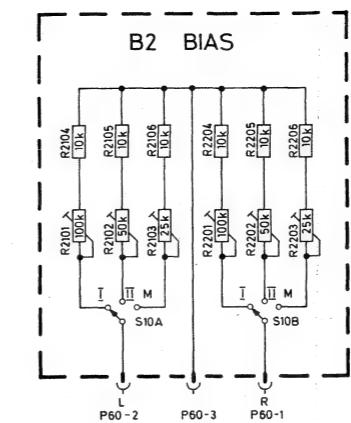
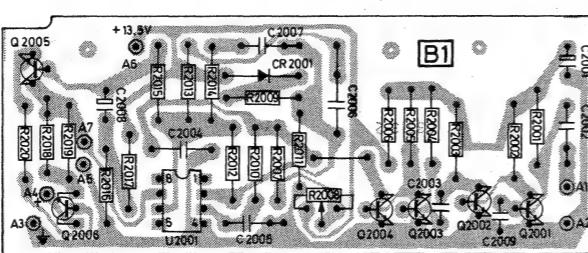
A9 METER AMP.



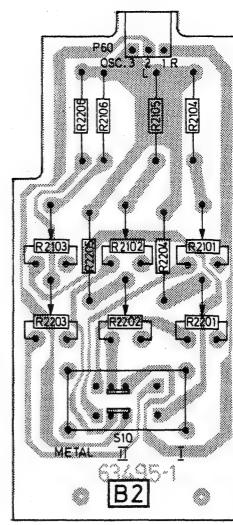
NOTES:

1. UNLESS OTHERWISE SPECIFIED RESISTANCE IN OHMS.
2. R2007, R2009 AND R211 ARE 1% METAL FILM RESISTORS.
3. C2004 = 0.1 μ 5% POLYKARBONAT.
4. R2008 = THICK FILM VARIABLE RESISTOR.

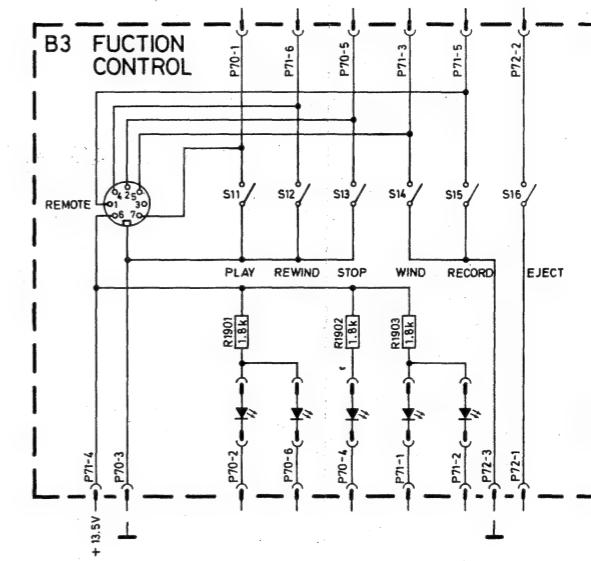
B1 MOTOR CONTROL



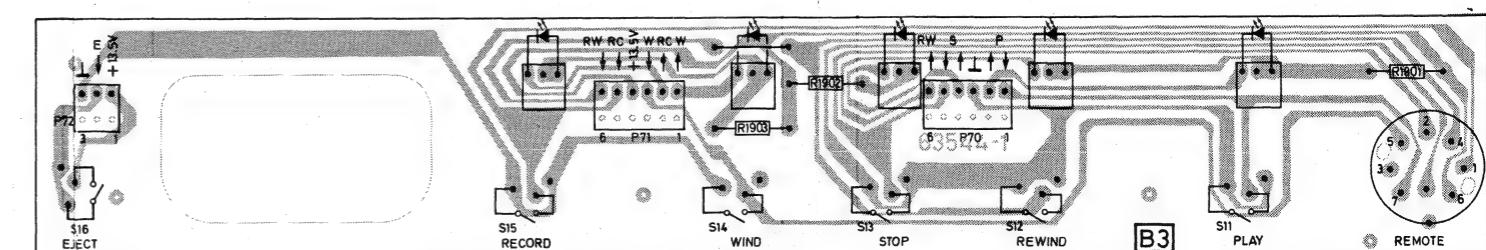
B2 BIAS



B2



B3 FUNCTION CONTROL



TANDBERG

TCD 440 A

Illustrated Parts List

Bestilling av deler

Ved alle henvendelser, vennligst oppgi apparatets type og serienummer.
Ved bestilling av deler, oppgi bestillingsnummer og beskrivelse.

Bestillingsadresse

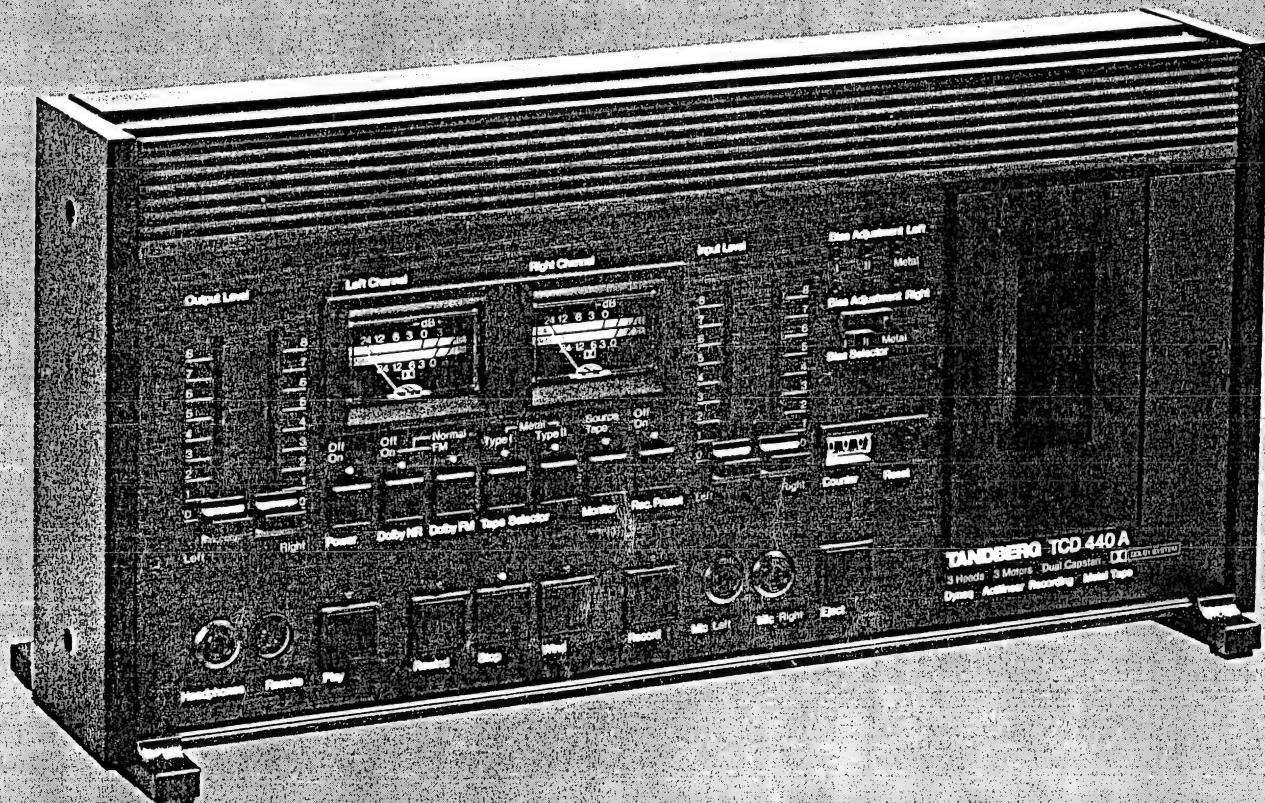
Kontakt nærmeste Tandberg-kontor eller:
Tandberg A/S
Sentral Delelager – Service
Postboks 53
N – 2007 KJELLER – Norge
Telefon: (02) 71 68 20
Telex: 18007 kurer n

Ordering of spare parts

For all enquiries, please state the set's type and serial number.
When ordering, give the part's order number and description.

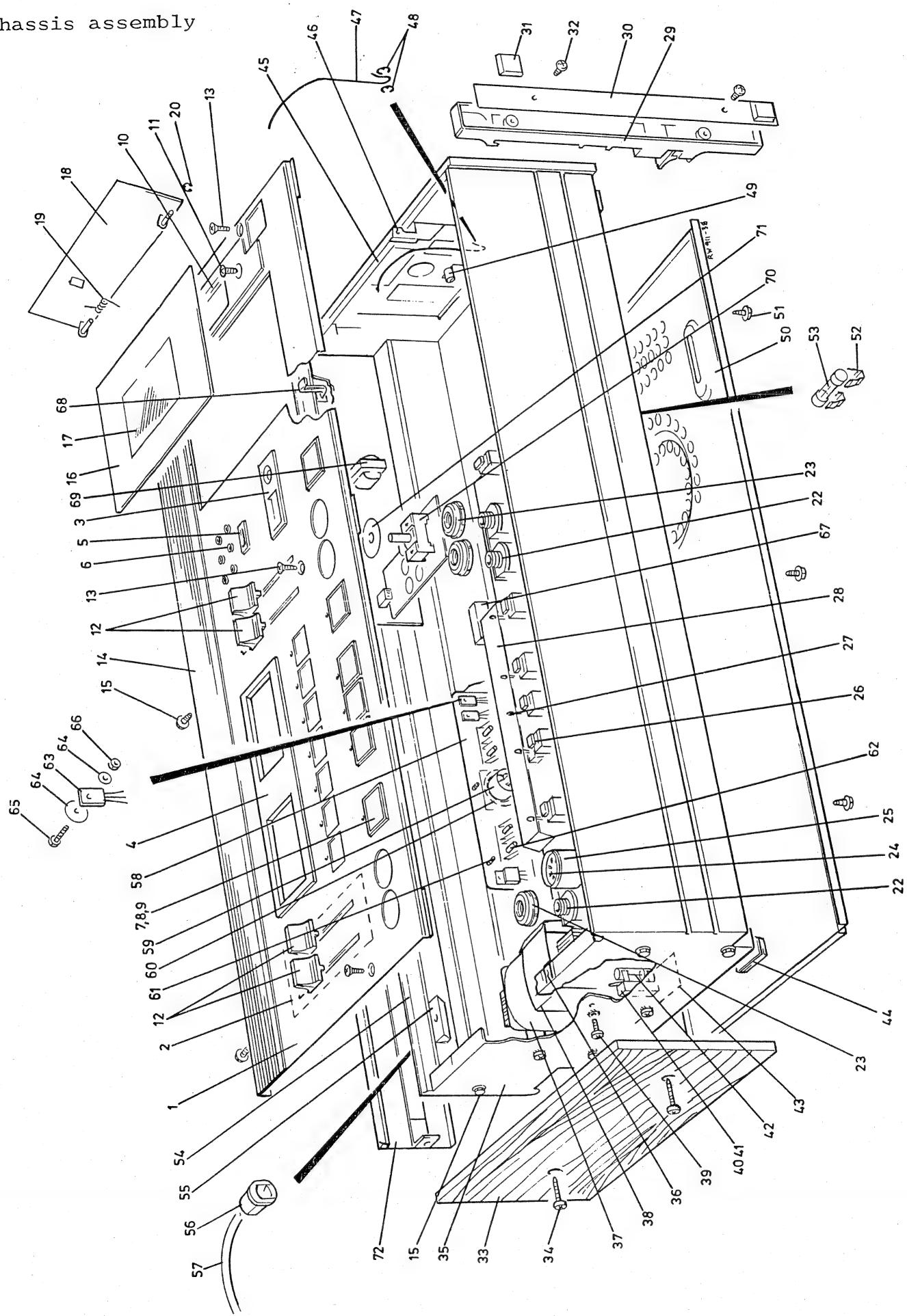
Address

Contact your nearest Tandberg office or:
Tandberg A/S
Spares Department
P.O. Box 53
N – 2007 KJELLER – Norway
Telephone: (2) 71 68 20
Telex: 18007 kurer n



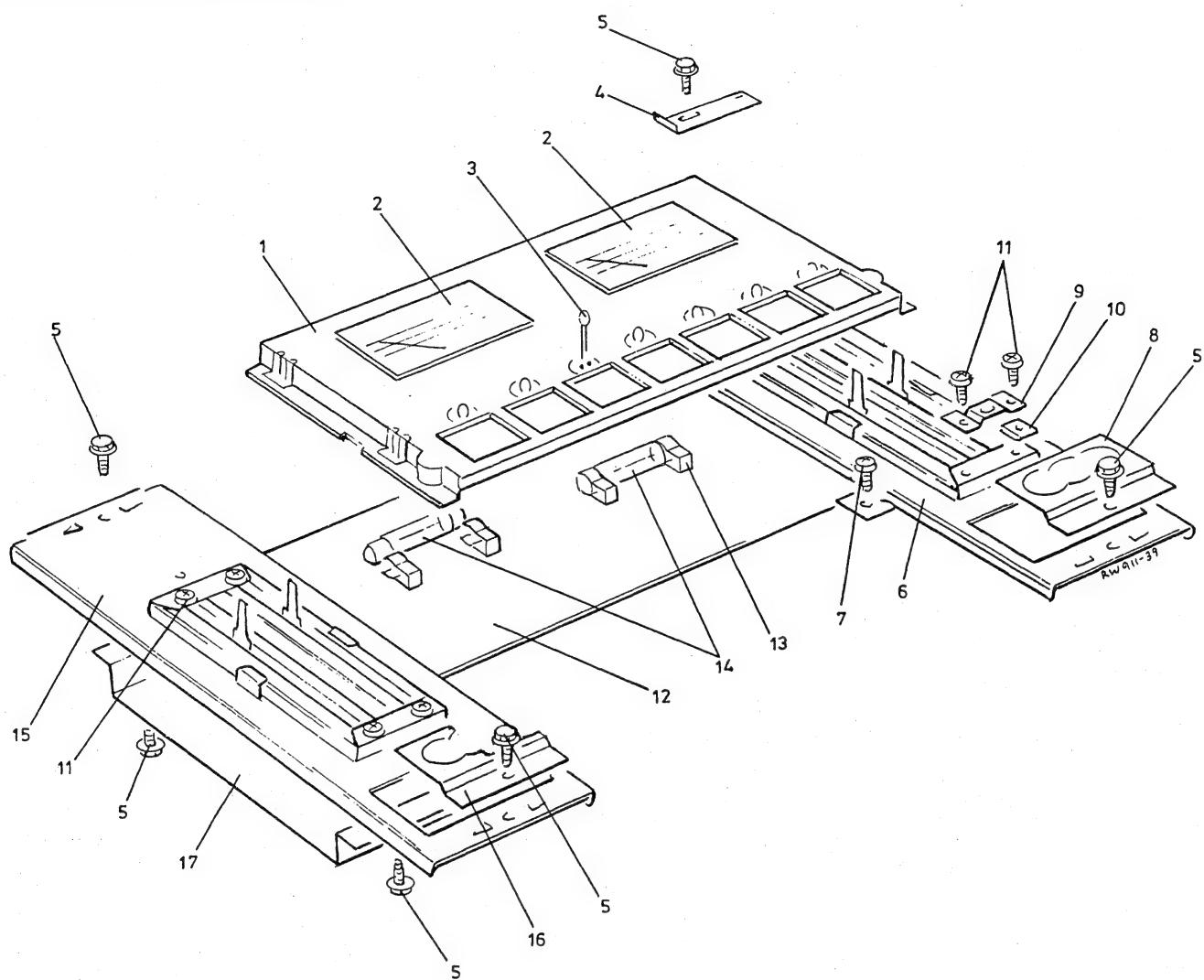
TANDBERG — The European Alternative

Chassis assembly



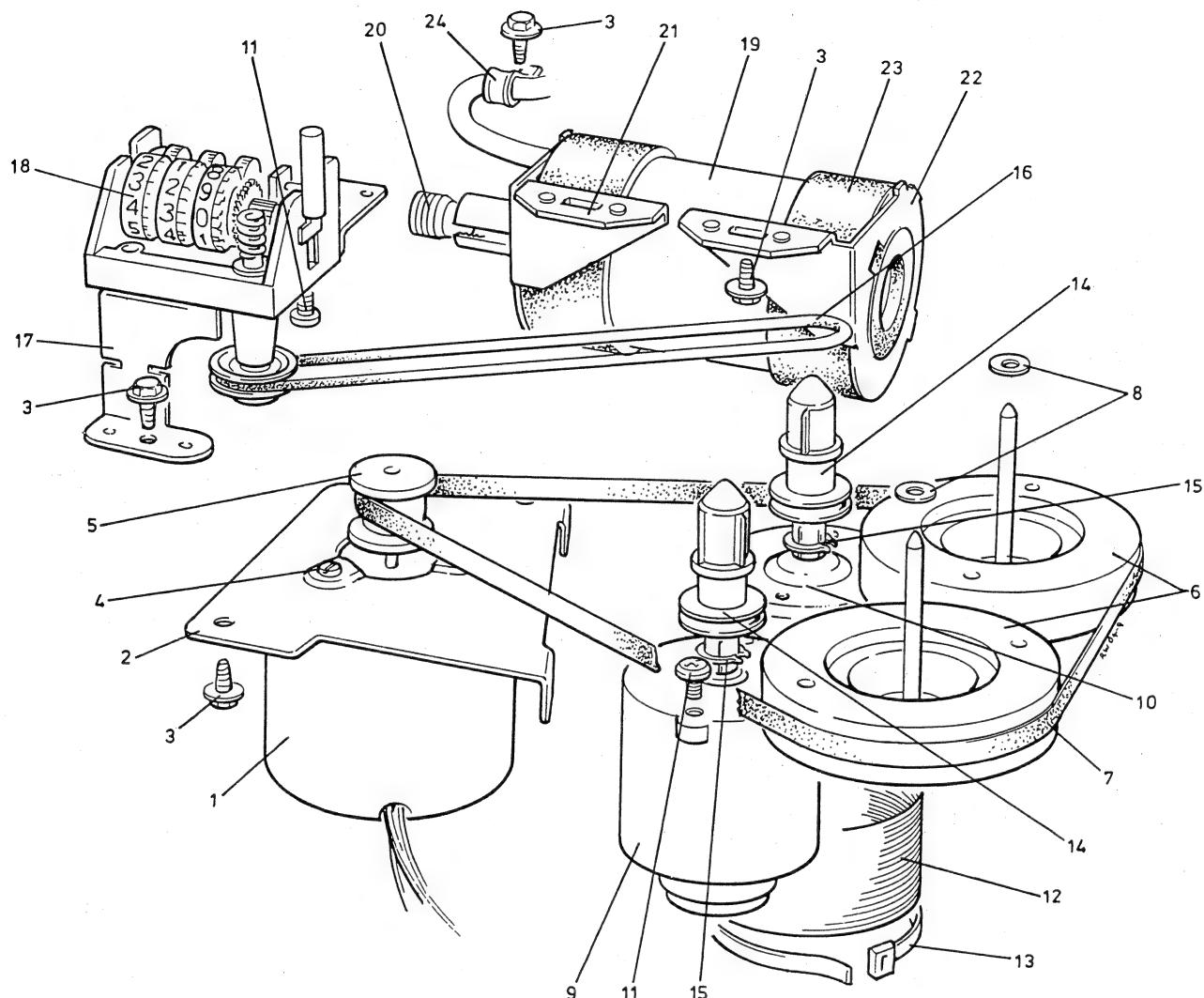
Index	SPECIFY THIS WHEN ORDERING	Ordering No.	Beskrivelse (merknader)	Description (notes)	Reference
1	*	995149	Sjassis-enhet	Chassis assembly	
			Plate	Plate, top	
2		292581	(lev. m/index 2-11)	(supplied with index 2-11)	
3		313191	Plate	Mask, felt	
4		374935	Vindu	Window, counter, plastic	
5		368958	Ramme	Surround, meter, plastic	
6		375403	Ramme	Surround, switch, black	
7		361215	Hylse	Grommet, black plastic	
8		376732	Ramme	Surround, push button, plastic	
9		362860	Knapp	Button, push	
10		346250	Fjær	Spring	
11		346840	Ramme	Surround, plastic	
12		994119	Skrue	Screw, plate, 1/4" No. 4 flange hd, black	INPUT LEVEL, OUTPUT LEVEL
13		234206	Knapp	Knob, black plastic, with spring	
14		408691	Skrue	Screw, plate, 3/8" No. 4 csk hd, black	
15		309060	Skinne	Plate, top	
16		995150	Deksel	Screw, plate, 1/4" No. 6 pan hd	
17		367321	Vindu	Cover	
18		995151	Løkk	Window, plastic	
19		345862	Fjær	Cover, with spindle	
20		230542	Skive	Spring	
21		995146	Skinne	Ring, circlip, 2.3 mm	
22		294420	Jack	Plate, front	
23		317372	Mutter	Socket, jack, 3 pole 1/4"	HEADPHONES, MIC L, MIC R
24		365955	Kontakt	Nut	REMOTE
25		365596	Hylse	Socket, 7 pin DIN 180 degrees	
26		364828	Vender	Surround, DIN socket, plastic	
27		352665	Diode	Switch, touch	
28	*	Plate	Diode, light emitting, red		
29		995148	Fot	Sheet, card	
			(lev. m/index 30-32)	Foot, pair	
30	*		(supplied with index 30-32)	(supplied with index 30-32)	
31		324297	Plate	Plate	
32		309693	Fot	Foot, rubber	
33		334878A	Skrue	Screw, plate, 1/4" No. 4 flange hd	
		371229	Kassett	Panel, rosewood	
34		262984	Kassett	Panel, black	
35		309599C	Skrue	Screw, plate, 5/8" No. 6 pan hd, black	
36		272739	Plate	Plate, side wall, left	
37		407520	Mutter	Nut, plate	
38		373577B	Transformer	Transformer	
39		346854	Plate	Cover, isolation	
40		357399	Skrue	Screw, 3.5 x 6.3 mm hex hd, with collar	
41		340813	Holder	Holder, fuse	
42		270526	Skrue	Screw, plate, 1/4" No. 2 pan hd	
		279952	Sikring	Fuse, 800 mA, 5 x 20 mm, slow	115 V
43		290211	Plåte	Fuse, 315 mA, 5 x 20 mm, slow	230 V
44		227949	Fot	Plate, isolation	
45		349390	Plate	Foot, rubber	
			(lev. m/index 46-49)	Plate, side wall, right	
46		349964	(supplied with index 46-49)	(supplied with index 46-49)	
47		347543	Brakett	Bracket, cover	
48		347543	Fjær	Spring	
49		239651	Skive	Ring, circlip, 3.2 mm	
50		351581	Strømpe	Sleeve, rubber	
51		319448A	Plate	Cover, bottom	
52		297925	Skrue	Screw, plate, 5/16" No. 6 flnge hd, black	
53		277509	Holder	Holder, fuse	
54		265736	Sikring	Fuse, 2 A, 5 x 20 mm, slow	230 V
55		289629	Sikring	Fuse, 2 A, 1 1/4" x 1/4"	115 V
56		995147	Skinne	Plate, rear wall	
57		319721	Brakett	Bracket, frame	
58		281454	Tube	Tube, cable, power	
59		357630	Ledning	Cable, power, with Europlug	U.S.A. version
60		346388	Ledning	Cable, power	
61		348413	Brakett	Bracket	
62		242244	Kontakt	Socket, 5 pin DIN 180 degrees	RADIO
63	*	282645	Ring	Ring, rubber	
64	*	290842	Skrue	Screw, 3 x 6 mm pan hd	INPUT, OUTPUT
		283773	Kontakt	Socket, phono	
65		271367	Transistor	Transistor	
66		271367	Skive	Washer	
			(lev. m/index 63)	(supplied with index 63)	
67		296417	Mutter	Nut, 2.6 mm	
68		335095	Skrue	Screw, 2.6 x 8 mm pan hd	MPX FILTER
69		300612A	Vender	Switch, slide	
70		980379	Klammer	Guide, plastic	
71		365682	Transformer	Transformer, oscillator	BIAS SELECTOR
72		374834	Vender	Switch, toggle	
		343471	Skive	Ring, felt	
			Deksel	Cover, rear	

Meter board assembly



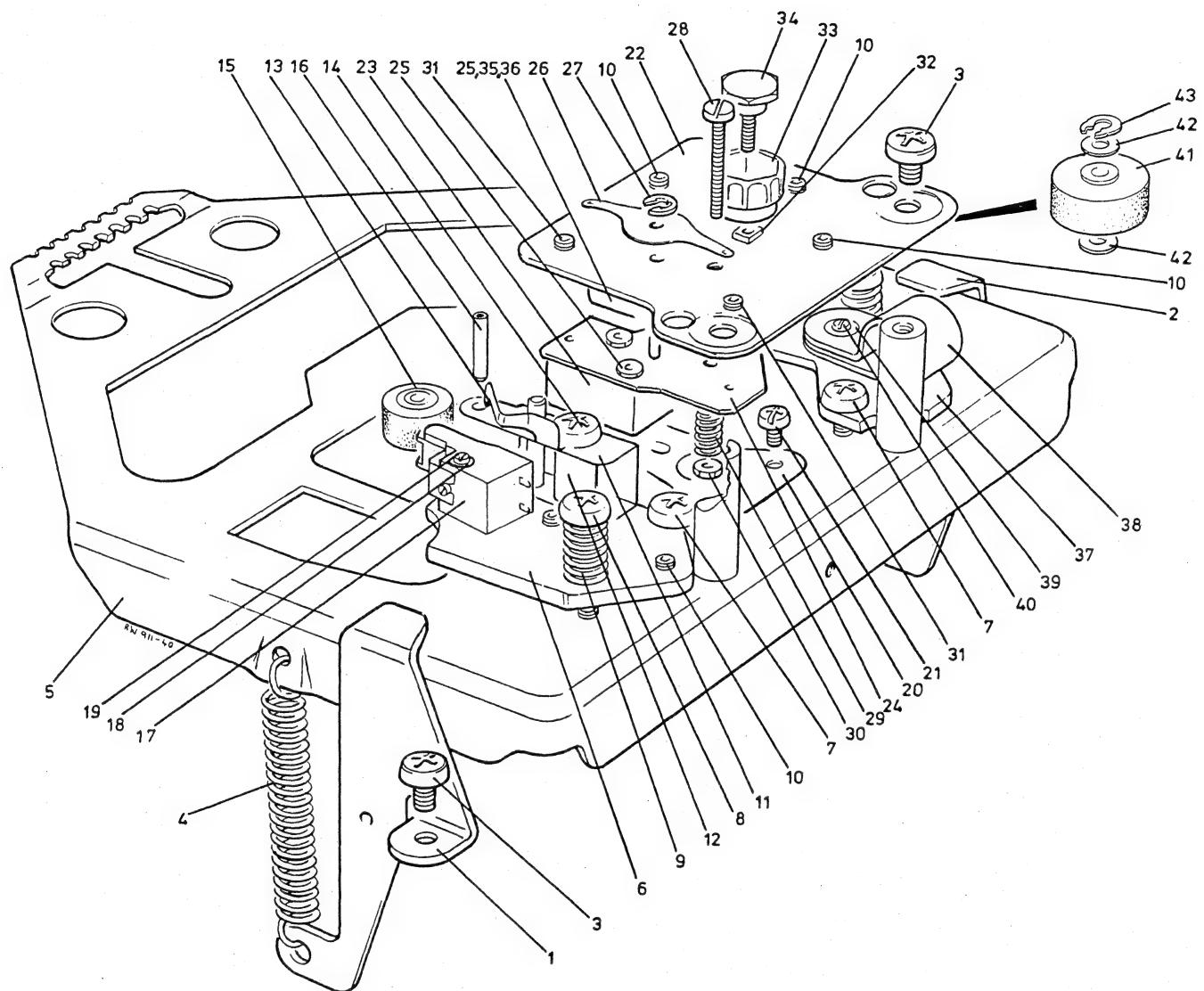
Index	SPECIFY THIS WHEN ORDERING		Description (notes)	Reference
	Ordering No.	Beskrivelse (merknader)		
1	*	Instrumentkort-enhet	Meter board assembly	
1	401493	Holder	Holder, meter	
2	402125	Instrument	Meter	
3	316531	Diode	Diode, light emitting	
4	347659	Stag	Plate	
5	346854	Skrue	Screw, 3.5 x 6.3 mm hex hd, with collar	
6	315734A	Ramme	Frame, potentiometer	
7	329598	Skrue	Screw, 3/16" No. 4 pan hd	
8	315382	Brakett	Bracket, microphone	
9	317063	Brakett	Bracket	
10	272739	Mutter	Nut, plate	
11	269255	Skrue	Screw, 3 x 4 mm pan hd	
12	995163	Kort	Board, meter	
13	330195	Holder	Holder	A9
14	333909	Lampe	Bulb, 10 V 50 mA	
15	317415A	Ramme	Frame, potentiometer	
16	995166	Brakett	Bracket, headphone	
17	995125	Skjerm	Screen, with insulation	

Drive assembly



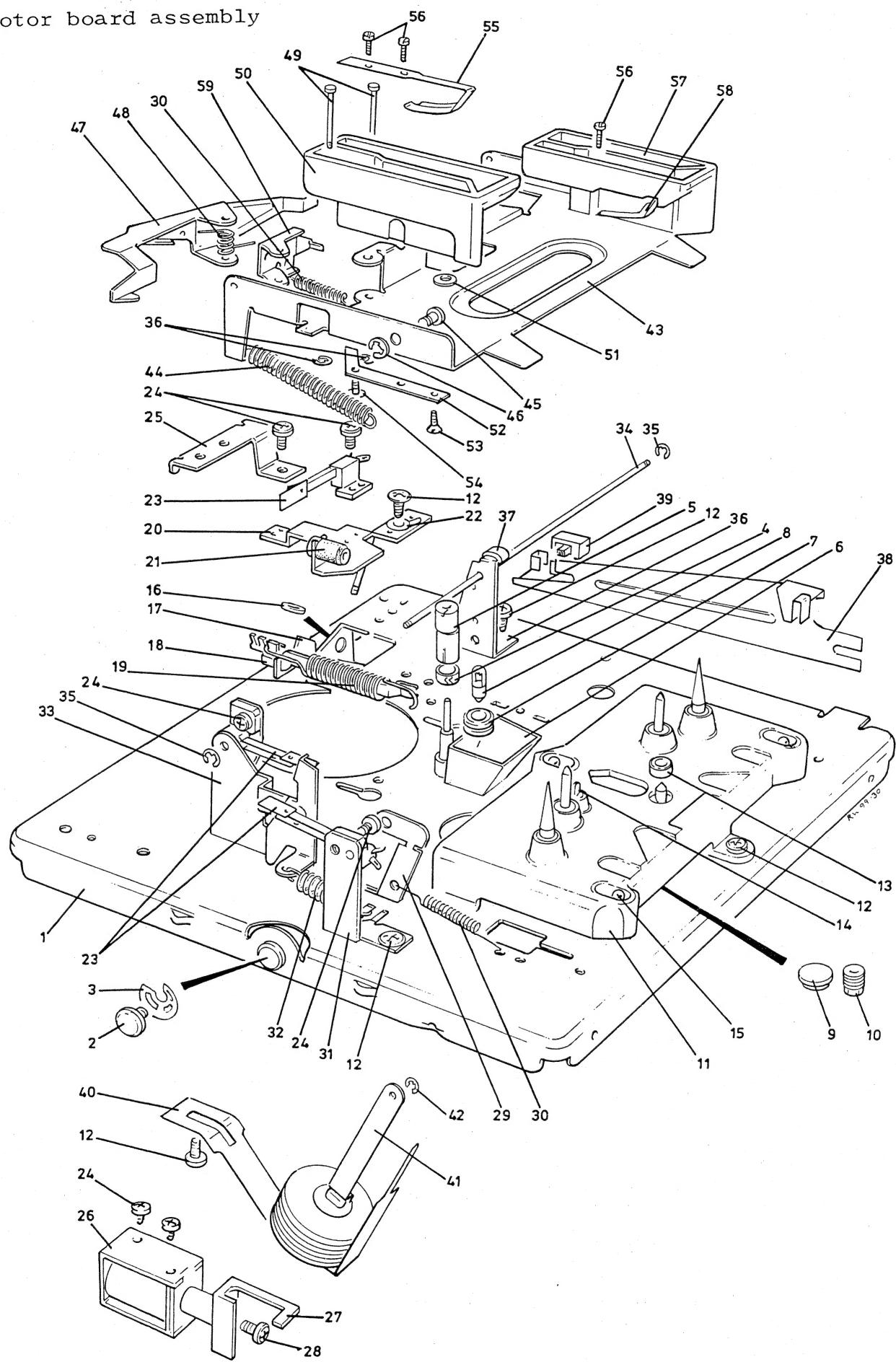
SPECIFY THIS WHEN ORDERING			Description (notes)	Reference
Index	Ordering No.	Beskrivelse (merknader)		
1	400092	Fremdrifts-enhet	Drive assembly	
2	377084	Motor	Motor	
3	346854	Plate	Plate, mounting, capstan motor	
4	403174	Skrue	Screw, 3.5 x 6.3 mm hex hd, with collar	
5	375051	Skrue	Screw, 2.6 x 3.5 mm pan hd	
6	994111	Hjul	Pulley, drive	
7	994183	Svinghjul (parvis tilpasset, og med indeks 7)	Flywheel (supplied in matched pairs and with index 7)	
8	285369	Ring	Belt, drive, rubber	
9	375086	Skive	Washer, 6 x 2.7 x 0.5 mm, plastic	
10	284823	Motor	Motor, non-cogging	
11	269255	Skrue	Motor	
12	306775	Skjerm	Screw, 3 x 4 mm pan hd	
13	319506	Bånd	Screen	
14	994113	Aksel (lev. m/index 15)	Strap, plastic Spindle, tape reel (supplied with index 15)	
15	213826	Ring	Ring, retaining, external, 6 mm	
16	309600	Ring	Belt, drive, rubber	
17	379117	Brakett	Bracket, support, counter	
18	280132	Teller	Counter	
19	994184	Trekkmagnet	Solenoid	L1, L2, Start solenoid
20	264212A	Skrue	Screw, nylon	
21	995101	Klammer	Bracket	
22	302300	Klammer	Bracket	
23	300942A	Hylse	Housing, rubber	
24	202684	Klammer	Clamp, cable, nylon, 5 mm	

Head plate assembly



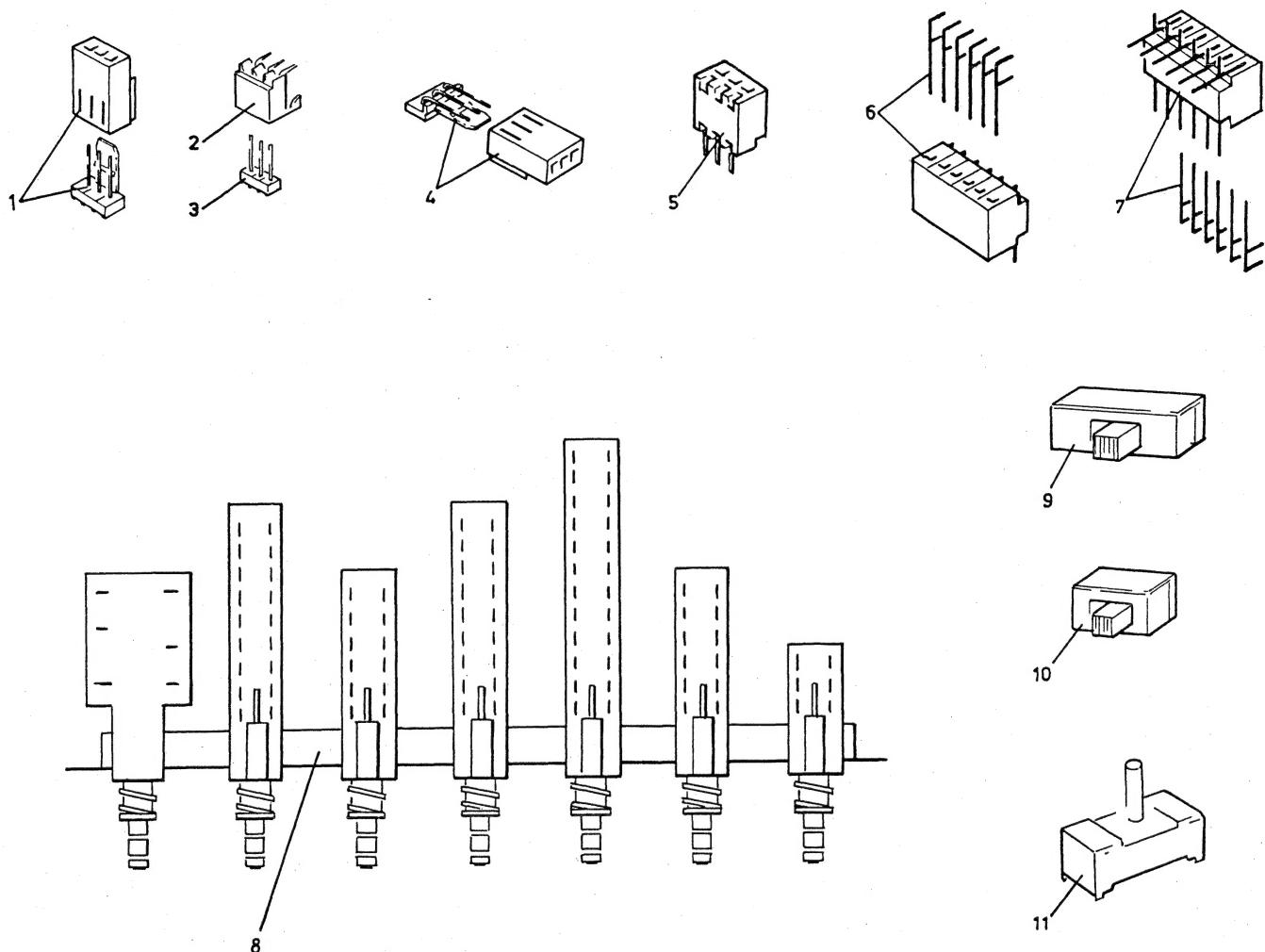
Index	SPECIFY THIS WHEN ORDERING		Description (notes)	Reference
	Ordering No.	Beskrivelse (merknader)		
1	304333A	Hodebro-enhet	Head plate assmbly	
2	345676	Arm	Bracket, guide, head	
3	269255	Skrue	Bracket, guide, head plate, right	
4	287732	Fjær	Screw, 3 x 4 mm pan hd	
5	*	Plate	Spring	
6	348061	Plate	Plate, mounting, head	
7	292523	Skrue	Plate, pressure, left	
8	293852	Skrue	Screw, 3 x 8 mm pan hd	
9	240406A	Fjær	Screw, 3 x 15 mm pan hd	
10	890002	Skrue	Spring	
11	342307	Bøyle	Screw, set, 3 x 7 mm	
12	337479A	Hylse	Bracket, U-shaped, pressure roller	
13	346997	Fjær	Spacer	
14	292171	Skrue	Spring	
15	333126	Valse	Screw, 3 x 12 mm pan hd	
16	341553	Aksel	Roller, pressure, rubber	
17	716481	Hode	Spindle	
18	356947	Skive	Head, erase	
19	340281	Skrue	Washer, 1.4 mm	
20	285699A	Fjær	Screw, 1.7 x 12 mm pan hd	
21	294520	Skrue	Spring, flat	
22	352608	Plate	Screw, 2.3 x 3 mm pan hd	
		(lev. m/index 32)	Plate, mounting, head, with nut	
23	715546	Hode	(supplied with index 32)	
		(lev. m/index 24,25)	Head, record, with plate	
24	349742	Plate	(supplied with index 24 and 25)	
25	336517	Mutter	Plate, mounting, head	
26	339433	Fjær	Nut	
27	234256	Skive	Spring	
28	326660	Skrue	Ring, circlip, 1.9 mm	
29	240406A	Fjær	Screw, 2 x 15 mm pan hd	
30	335755A	Mutter	Spring	
31	890001	Skrue	Nut, 2 mm	
32	341395	Hylse	Screw, set, 3 x 6 mm	
33	347458	Hylse	Nut, plastic	
34	347385	Skrue	Knob, black plastic	
35	716480	Hode	Screw	
		(lev. m/index 25,36)	Head, playback, with plate	
36	337400	Plate	(supplied with index 25 and 36)	
37	317042	Plate	Plate, mounting, head	
38	219221	Klammer	Plate, pressure, right	
39	355934	Skive	Clamp, cable, nylon, 7 mm	
40	292487	Skrue	Washer, 5 x 2.2 x 0.3 mm	
41	860004A	Hjul	Screw, 2 x 5 mm pan hu	
42	244377	Skive	Roller, pressure, rubber	
43	212145	Ring	Washer, 6 x 2.5 x 0.3 mm	
			Ring, retaining, external, 2.5 mm	

Motor board assembly



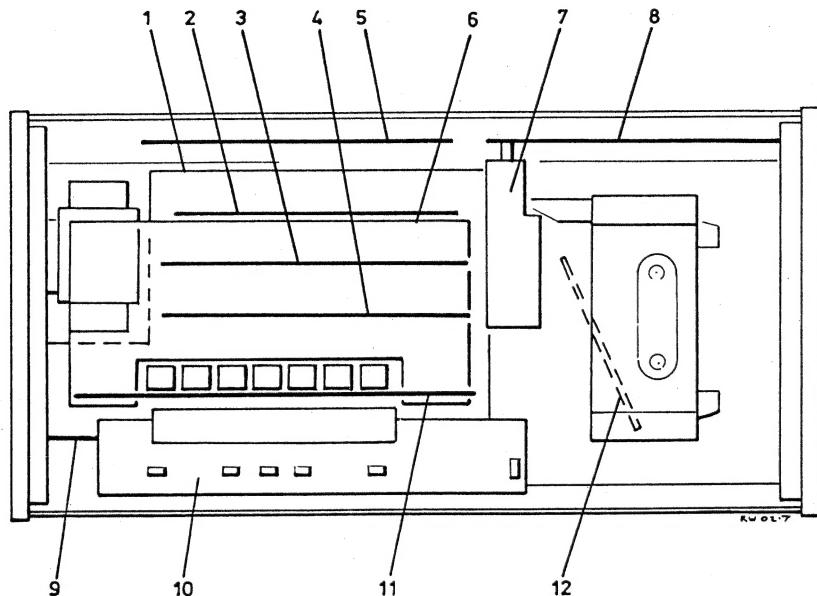
Index	SPECIFY THIS WHEN ORDERING	Description (notes)	Reference
Index	Ordering No.	Beskrivelse (merknader)	
1	*	Motorplate-enhet	
1	995145	Plate	
2	302020	Aksel	
3	245649	Skive	
4	229824	Klips	
5	301395	Hylse	
6	301747A	Skjerm	
7	285720	Tube	
8	995152	Lampe	
9	355014	Plate	
10	371351	Skrue	
11	994117	Plate	
12	346854	Skrue	
13	207173	Lager	
14	304326	Plugg	
15	303622	Kule	
16	217152	Skive	
17	301323	Arm	
18	344132	Arm	
19	304685	Fjær	
20	994112	Brakett	
21	202303	Tube	
22	223675	Loddeøre	
23	284119	Vender	
24	269255	Skrue	
25	318392	Klammer	
26	354001	Magnet	
27	351732	Arm	
28	290842	Skrue	
29	353140A	Arm	
30	293824	Fjær	
31	303004	Brakett	
32	313183	Fjær	
33	346732	Brakett	
34	301668	Aksel	
35	237970	Skive	
36	347357A	Brakett	
37	351581	Strømpe	
38	345668	Arm	
39	348887	Vender	
40	995134	Belg	
41	360129	Arm	
42	234256	Skive	
43	300490A	Brakett	
44	289413	Fjær	
45	304678	Tapp	
46	230542	Skive	
47	287380A	Arm	
48	365130	Fjær	
49	301316	Aksel	
50	994120	Styring	
51	215320	Skive	
52	995135	Brakett	
53	234206	Skrue	
54	292875	Skrue	
55	291791	Fjær	
56	299606	Skrue	
57	994121	Styring	
58	290110	Fjær	
59	304103	Arm	

Connectors and switches



Index	SPECIFY THIS WHEN ORDERING		Description (notes)	Reference
	Ordering No.	Beskrivelse (merknader)		
1	995818 995819 995820	Kontakter Kontakt Kontakt	Connectors Connector, 2 pole, small Connector, 3 pole, small Connector, 4 pole, small	
2	340806	Kontakt	Connector, fixed, 3 pole, small	
3	316575	Plint	Connector, fixed, 3 pole, small	
4	996301	Kontakt	Connector, 3 pole, horizontal, small	
5	318320	Kontakt	Connector, fixed, 3 pole	
6	996302	Kontakt	Connector, 3 pole, black	
7	996303 996304 996305	Kontakt Kontakt Kontakt	Connector, 6 pole, black Connector, 3 pole, black Connector, 6 pole, black	
8	408339	Vendere Vender	Switches Switch, push	POWER, DOLBY NR, DOLBY FM TAPE SELECTOR, MONITOR, REC.PRESET
9	348887	Vender	Switch, slide	S9
10	335095	Vender	Switch, slide	S8, MPX FILTER
11	365682	Vender	Switch, toggle	BIAS SELECTOR

Printed circuit boards



Index	SPECIFY THIS WHEN ORDERING		Description (notes)	Reference
	Ordering No.	Beskrivelse (merknader)		
1	*	TK plater	Printed circuit boards	
1	995155	Kort	Board, mother	A1
2	995160	Kort	Board, playback amplifier	A6
3	995156	Kort	Board, Dolby encoder	A5
4	995158	Kort	Board, record amplifier	A4
5	995165	Kort	Board, Dolby decoder	A7
6	995163	Kort	Board, fader	A9
7	995154	Kort	Board, bias	B2
8	995157	Kort	Board, oscillator	A8
9	995161	Kort	Board, logic	A2
10	995162	Kort	Board, function control	B3
11	995159	Kort	Board, switch	A3
12	995153	Kort	Board, motor control	B1